



# Defending against Big Dada: Defensive Tactics for Weapons of Mass Deception

Hal Berghel, *University of Nevada, Las Vegas*

---

**The first casualty of power politics, advocacy journalism, dark propaganda, rumor mills, and media-politico echo chambers is truth. Here's a defensive tactic for your consideration.**

---

**A**s I prepare this column on infosphere pollution ("infopollution"), I am reminded of a column I wrote on information overload in 1997.<sup>1</sup> Some of my predictions were spot on—for example, the Web did indeed evolve toward multi-mediocrity and self-indulgent tripe. To deal with this, some of us experimented with "cyberbrowsers" that could be optimized to improve search relevance and maximize information uptake.<sup>2,3</sup> But I was deluded into thinking that the solution to the needle-in-a-haystack problem was primarily a navigational issue. I failed to anticipate that the Web would become a convenient weapon of mass deception. As the Web's toxicity increased, it became obvious that sophisticated navigation alone wouldn't solve the information overburden problem, and that defensive browsers were needed. By the mid-1990s the infor-

mation content of large parts of cyberspace rivaled that of air dancers and lava lamps.

This toxicity might have been anticipated by alert and well-read software developers. By 1990, mass media propaganda models had been carefully articulated by scholars such as Alex Carey,<sup>4</sup> and Edward Herman and Noam Chomsky.<sup>5</sup> Further, since the 1960s, the dystopic Orwell-Huxley models had been extended to mass media—as Neil Postman describes in *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*.<sup>6</sup> However, even if the handwriting was on the wall, I was blindsided by infopollution's most insidious side: mass deception. Now this is my chance to redeem myself for the oversight.

## LOGIC AT ITS LEAST FORMAL

Like so many of my generation, my introduction to logic was through

Irving Copi's text of the same name. For many American college freshmen, this classic tome was a solid foundation for a college career. What it was not, however, was a breathtakingly relevant companion to help with life's challenges. Students who expected Copi to provide insight into the Vietnam War, the Civil Rights Movement, President Johnson's War on Poverty, and Nixonian political chicanery were disappointed. For that reason, when I began to teach the course as a graduate instructor I complemented a more rigorous primer on formal logic with a book by Howard Kahane.<sup>7</sup> Pedagogically, the combination of rigor and relevance was far more satisfying on a number of levels.

What made Kahane's book important was that it codified the notion of informal fallacy—that dimension of illogic that confronts us daily. This is not to diminish Aristotelian syllogism's importance by any means, but

*modus ponens* and its syllogistic siblings just don't come up that often in daily discourse. On the other hand, it's difficult to get through a campaign speech, talk show, or political commentary without being assaulted by such wafts of fallacious reasoning as to offend a refined intellect. Kahane augmented a thorough collection and exposition of informal fallacies with real-life examples. His book is as important today as it was in 1971 when it was first published, and it should be required reading for every college freshman.

Though worthy, the study of informal logic has one serious shortcoming: it assumes that truthful statements are the sine qua non of meaningful communication. Informal fallacies document the point at which serious reasoning goes awry. Even when embedded in a broader, overarching "argumentation theory" or dialectic, informal logic assumes that traditional fallacies are departures from the conversational norm—but not the norm itself.

Propaganda, polemic, subterfuge, and trickery eschew sound argument. They seek to manipulate, maneuver, and control the listener—obstructing reflection on sound judgment. Rhetorical weaponry—like lying and deceit—assaults sensibilities by using false flags and distractions that informal logic just can't handle. When it comes to criminals, politicians, and ideologues, we need to go to the nuclear option.

## DECEPTIONS "R" US

A new tool has been made available to deal with the increased volume of sophistry and tergiversation. Philip Houston, Michael Floyd, Susan Carnicero, and Don Tennant published a book entitled *Spy the Lie*.<sup>8</sup> This is a fun book to read, and more than that, it's a terrific practical supplement to informal logic because it specifically deals with lies and liars (see the "Learn from the Pros: Detecting Deception" sidebar).

The first three authors are or were CIA polygraph experts who developed and extended a deception-detection methodology for "the company" to determine a subject's truthfulness. As they point out in the book, while the primary targets might have been

criminals and terrorists, the methodology equally applies to media personalities, politicians, and criminals—groups that most of us are far more likely to encounter. Observing the lies of public officials takes us to the next level of cerebral combat, one in which it's appropriate to assume a high likelihood of deceit.

These CIA investigators spent much of their adult life listening to people lie—making them both good investigators and listeners. I envision the sign on their office door reads "Deceptions 'R' Us."

The book presents actual examples of deception as practiced by politicians, spies, and criminals—in many cases using verbatim testimony from interrogations and interviews. Truth seekers will find their analysis fascinating. I'll illustrate their deception-detection methodology with one of my favorite examples derived from recent testimony from NSA Director Keith Alexander to the Senate Intelligence Committee (see [www.youtube.com/watch?v=Nwg\\_ughXO8s](http://www.youtube.com/watch?v=Nwg_ughXO8s)).

**Senator Jeff Merkley (D—Ore.):** "Section 215 [of the Patriot Act] requires an application for production of any tangible thing... that it must have a statement of facts showing reasonable grounds that the tangible things sought are relevant to an authorized

investigation. ... Now as it's been described ... the standard for collecting phone records on Americans is now all phone records, all the time, all across America. ... How do we get from the reasonable grounds, relevant, authorized investigations, statement of facts to all phone records, all the time, all

---

**It's difficult to get through a campaign speech, talk show, or political commentary without being assaulted by such wafts of fallacious reasoning as to offend a refined intellect.**

---

locations. How do we make that transition and how has the standard of the law been met?"

**General Keith Alexander (Director, NSA):** "So this is what we have to deal with [in] the courts. ... We go through this court process. It's a very deliberate process. It's where we meet all of those portions of the 215. We lay out for the court what we're going to do, and to meet that portion that you just said, the answer is that we don't get to look at the data. We don't get to swim through the data."

Note that Merkley didn't ask anything about when the NSA got to *look at* the phone data, he was asking about the justification for *collecting* the phone data. Note how Merkley immediately stops what *Spy the Lie* calls a "failure to answer response," which is further elaborated on in the sidebar.

**Sen. Merkley:** "Let me stop you there because these are requirements to acquire the data, not to analyze the data—to acquire the data. ... Here I have my Verizon phone. What authorized investigation gave you the grounds to acquire my cell phone data?"

**Dir. Alexander:** "I want to make sure I get this exactly right. I think on the legal standards and stuff on this part

## LEARN FROM THE PROS: DETECTING DECEPTION

**S**py the Lie's appeal is broader than my immediate interest.<sup>1</sup> The book's subtitle sums up the scope nicely: *Former CIA Officers Teach You How to Detect Deception*.

The book begins with a description of the authors' apparent home-grown "deception-detection methodology," initially developed within the CIA for internal use. Although the methodology's application remains classified by the CIA, the methodology itself was unclassified and exported to the private sector in the mid-1990s and ultimately surfaced in this book.

Not only is this book an enjoyable read, but it also offers an excellent refresher course in detecting deceptive practices. Politicians and mainstream media outlets are active proselytizers—aggressively recruiting support for political or corporate agendas. Free and open discussion isn't their goal. Their aim is to take advantage of what Aldous Huxley referred to as humankind's infinite capacity for distraction from the important issues of life. Failure to appreciate this simple fact has produced a mind-numbing array of subcerebral media broadcasts.

Beyond the deception-detection methodology, *Spy the Lie* also includes a discussion on the polygraph's use and limitations as well as some explanation on how to interpret results. The authors discuss strategic principles and guidelines, and even offer a few examples of how the trained examiner annotates the polygraph transcription.

But, for me, chapters 5 and 8 are the most interesting: "What Deception Sounds Like" and "What Deception Looks Like," respectively. Here's a sample list of the topics covered therein.

The sounds of deception (not to be confused with the Simon & Garfunkel song) consist of the following:

- failure to answer the question asked;
- the absence of denials, including nonspecific denials (also known as "nondenial denials") and isolated delivery of denials (namely, burying the denial in a verbal smokescreen);
- reluctance or refusal to answer;
- repeating the question;
- nonanswer statements;
- inconsistent statements;
- going into attack mode;

- inappropriate questions;
- overly specific answers;
- inappropriate level of politeness;
- inappropriate level of concern;
- process or procedural complaints;
- failure to understand simple questions;
- referral statements (such as, "I would refer you to my op ed of 4 January");
- selective memory;
- qualifiers, including exclusion qualifiers (betrayed by qualifiers like "essentially," "probably," and the like) and perception qualifiers (used to enhance credibility, for example, "to be perfectly honest");
- convincing statements (full-metal-jacket deceit that may stagger the senses; this gets an entire chapter!)

The look of deception includes of the following:

- throat clearing or swallowing,
- hand-to-face activity,
- anchor-point movement (the parts of the body that anchor the speaker to a particular position),
- grooming gestures,
- avoidance of eye contact, and
- closed postures.

Each category is carefully explained and replete with examples. Overall, this book offers considerable insight into the world of investigators who spend their days listening to people lie to them. Learning to recognize signs of deception is an essential skill, even in today's putatively polite society.

And although informal logic can be thought of as a code of conduct for intellectually honest combatants in search of truth, the deception-detection methodology explained in *Spy the Lie* helps referee those situations in which objectivity and fair play are unlikely, namely in mass media and politics.

## References

1. P. Houston et al., *Spy the Lie*, St. Martin's Griffin, 2012.

here we need to get the Department of Justice—because this is a complex area—you're asking a specific question. I don't want to shirk that, but I want to make sure that I get it exactly right. [We should revisit this topic] with the intent of getting what you asked and get it declassified and get it out to the

American people so that they can see exactly how we do it. I do think that should be answered."

By way of background, Merkley is asking a very straightforward question that Alexander already answered (falsely) in congressional

testimony many times before. Merkley has asked for a disclosure of the specific investigation that allows the NSA to collect Merkley's phone metadata. That the NSA collected it was well known due to the Snowden leaks, which were already public by the time of this hearing. It's

certainly possible that Alexander's verbosity and evasion camouflages ignorance—which might say more about the weakness of the NSA director appointment process than it does about Alexander. It seems more likely, however, that Alexander's testimony camouflages deception.

Using my *Spy the Lie* deception-detection training (namely, I read the book), I present my analysis: Alexander uses a combination of *referral statements*—to the Department of Justice—to deflect the heat, plus *overly specific answers* by raising the legal framework issue. What was asked was “what was the relevant authorized investigation,” not “what was the statute that enabled the authorized investigation.” Further, Alexander used *exclusion qualifiers*, such as “this is a complex area,” and “I want to get it exactly right.” As an afterthought, he suggested that the answer to the original simple question might actually be classified. If true, this would render the entire exchange pointless. Alexander is apparently using a shotgun approach to rhetoric, hoping that something he says will sufficiently distract the Senate Intelligence Committee long enough so he can leave the chambers and regroup. It's worth noting that until the Snowden revelations, Alexander routinely denied that the NSA had the capability to collect phone metadata at all (<http://hotair.com/archives/2013/06/07/video-did-the-nsa-director-lie-to-congress>). In my humble opinion, this qualifies for an indictment on several counts of crap dispersal before Congress without a license.

So that's my interpretation. I invite you to read a copy of *Spy the Lie*, watch the actual video footage of the testimony, and compare your results with mine. Let me know how you do.

*Spy the Lie*'s technique and informal logic work together to help us disinfect our infospheres from crap, bilious bombast, media-babble,

disinformation campaigns, pseudo-events, and bad information of every stripe. These days common sense itself doesn't cut it. We need tools!

## PDOOMA MOMENTS

I should mention one additional category of deception that still defies

Feinstein's claims. He subsequently apologized. At this writing, it seems unlikely that Brennan knew about the Senate spying, otherwise he wouldn't have asked for an internal investigation. Such being the case, this story reveals that Brennan was having a PDOOMA moment rather

---

**We have unwittingly made infopollution much worse by increasing network storage capacity and bandwidth without a corresponding advance in filtering capability. We've turned big data into big dada.**

---

analysis: PDOOMA explanations. An example of these is from 2014 when the CIA spied on senators and staffers conducting a probe into the alleged torture of detainees from 2001 to 2006 authorized by the Bush–Cheney administration. In March 2014, CIA Director John Brennan had this to say in response to Senator Dianne Feinstein's charge that the CIA was spying on Senate Intelligence Committee activities:

“As far as the allegations of, you know, CIA hacking into, you know, Senate computers, nothing could be further from the truth. I mean, we wouldn't do that. I mean, that's, that's just beyond the, you know, the scope of reason in terms of what we would do. ... When the facts come out on this, I think a lot of people who are claiming that there has been this tremendous monitoring and hacking will be proved wrong.”

(Brennan's remarks are reproduced by Democracy Now! at [www.democracynow.org/2014/8/1/john\\_brennan\\_faces\\_calls\\_to\\_resign](http://www.democracynow.org/2014/8/1/john_brennan_faces_calls_to_resign); the article that broke this story is at [www.mcclatchydc.com/2014/07/31/234997/cia-staffers-accessed-senate.html](http://www.mcclatchydc.com/2014/07/31/234997/cia-staffers-accessed-senate.html).)

On 31 July 2014, Brennan revealed that an internal CIA investigation confirmed the truth of

than lying. He just pulled his response from thin air—or wherever.

## OTHER RESOURCES

Neil Postman, issuing his own warnings on the dangers of infopollution to the minds of young people, began his 1969 speech to the National Convention for the Teachers of English<sup>9</sup> with a quote from Ernest Hemingway to the effect that the most important quality for a good writer was a “built-in, shock-proof, crap detector.” Despite yeoman efforts by Hemingway, Postman, comedian George Carlin (as in his comedy routine “It's Bad For Ya”; [Laugh.com](http://Laugh.com)), technology guru Howard Rheingold (<http://blog.sfgate.com/rheingold/2009/06/30/crap-detection-101>), not to mention George Orwell and Aldous Huxley, most people still don't behave as if they understand that humankind is awash in a sea of content-free, misleading, or false information. As Postman notes, “... there is nothing more important for kids to learn [than] how to identify fake communication.” But here we are a half-century later and the population is no better prepared to deal with infopollution. In fact, we computing professionals have unwittingly made infopollution much worse by increasing network storage capacity and bandwidth without



a corresponding advance in filtering capability. We've turned big data into big dada.

**P**edagogical resources that specifically deal with the problem of disinformation are few and far between. Howard Rheingold's Mini-Course (<http://rheingold.com/2013/crap-detection-mini-course>) is one that's worthy of attention. *Spy the Lie* takes a tactical approach to the problem, whereas Rheingold takes a strategic approach, focusing on credibility and independence of thought, especially as it relates to the Internet. Another useful resource is John McManus' recent book, *Detecting Bull*.<sup>10</sup> The world would be a better place if any of these resources were required reading for citizenship. 

## References

1. H. Berghel, "Cyberspace 2000: Dealing with Information

Overload," *Comm. ACM*, vol. 40, no. 2, 1997, pp. 19–24.

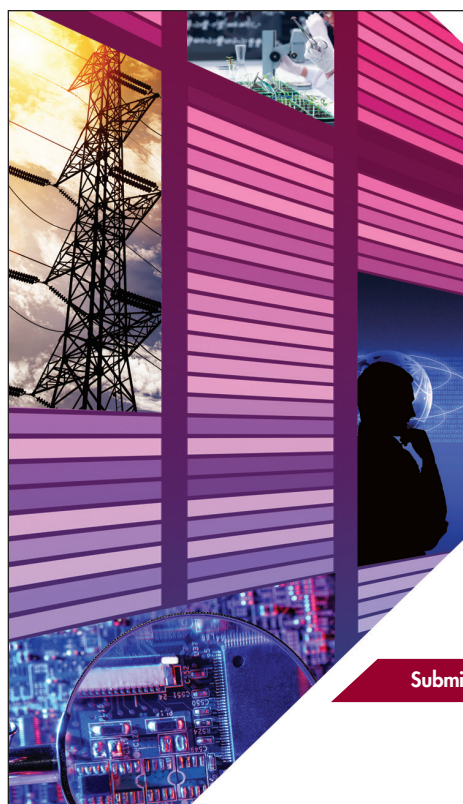
2. D. Berleant and H. Berghel, "Customizing Information: 1. Getting What We Need, When We Need It," *Computer*, vol. 27, no. 9, 1994, pp. 96–98.
3. D. Berleant and H. Berghel, "Customizing Information: 2. How Successful Are We so Far?," *Computer*, vol. 27, no. 10, 1994, pp. 76–78.
4. A. Carey, *Taking the Risk out of Democracy: Corporate Propaganda versus Freedom and Liberty*, Univ. of Illinois Press, 1997.
5. E.S. Herman and N. Chomsky, *Manufacturing Consent: The Political Economy of the Mass Media*, Pantheon, 1988.
6. N. Postman, *Amusing Ourselves to Death: Public Discourse in the Age of Show Business*, Penguin Books, 2005.
7. N. Cavender and H. Kahane, *Logic and Contemporary Rhetoric: The Use of Reason in Everyday Logic*,

11th ed., Cengage Learning, 2013.

8. P. Houston et al., *Spy the Lie*, St. Martin's Griffin, 2013.
9. N. Postman, "Bullshit and the Art of Crap-Detection," lecture, Nat'l Convention for the Teachers of English, 28 November, 1969, Washington, D.C.; <http://criticalsnips.wordpress.com/2007/07/22/neil-postman-bullshit-and-the-art-of-crap-detection>.
10. J. McManus, *Detecting Bull*, CreateSpace Independent Publishing Platform, 2012.

**Hal Berghel** is an ACM and IEEE Fellow and a professor of computer science at the University of Nevada, Las Vegas. Contact him at [hlb@computer.org](mailto:hlb@computer.org).

**cn** Selected CS articles and columns are available for free at <http://ComputingNow.computer.org>.



## CALL FOR STANDARDS AWARD NOMINATIONS

### IEEE COMPUTER SOCIETY HANS KARLSSON STANDARDS AWARD



A plaque and \$2,000 honorarium is presented in recognition of outstanding skills and dedication to diplomacy, team facilitation, and joint achievement in the development or promotion of standards in the computer industry where individual aspirations, corporate competition, and organizational rivalry could otherwise be counter to the benefit of society.

**NOMINATE A COLLEAGUE FOR THIS AWARD!**

**DUE: 15 OCTOBER 2014**

**PAST RECIPIENT: ANNETTE D. REILLY**

- Requires 3 endorsements.
- Self-nominations are not accepted.
- Do not need IEEE or IEEE Computer Society membership to apply.

*"For harmonization and development of novel approaches to the system and software engineering standards for vocabulary, life-cycle information, and user documentation."*

Submit your nomination electronically: [awards.computer.org](http://awards.computer.org) | Questions: [awards@computer.org](mailto:awards@computer.org)



**IEEE**

IEEE  computer society